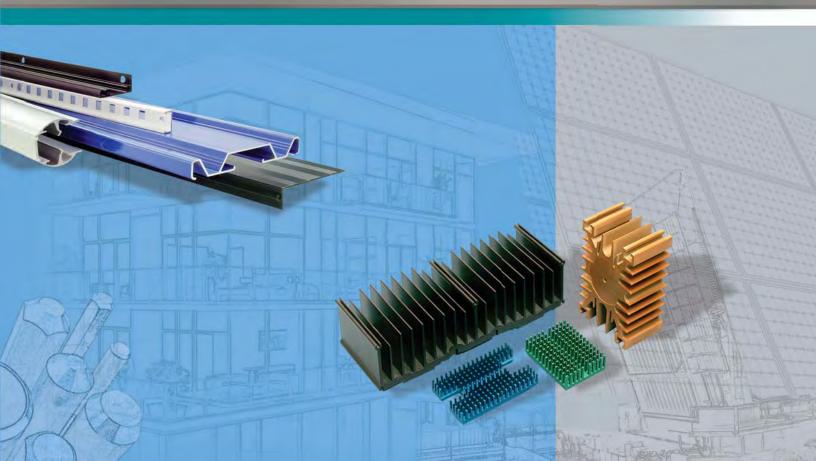
### Sapa Extrusions

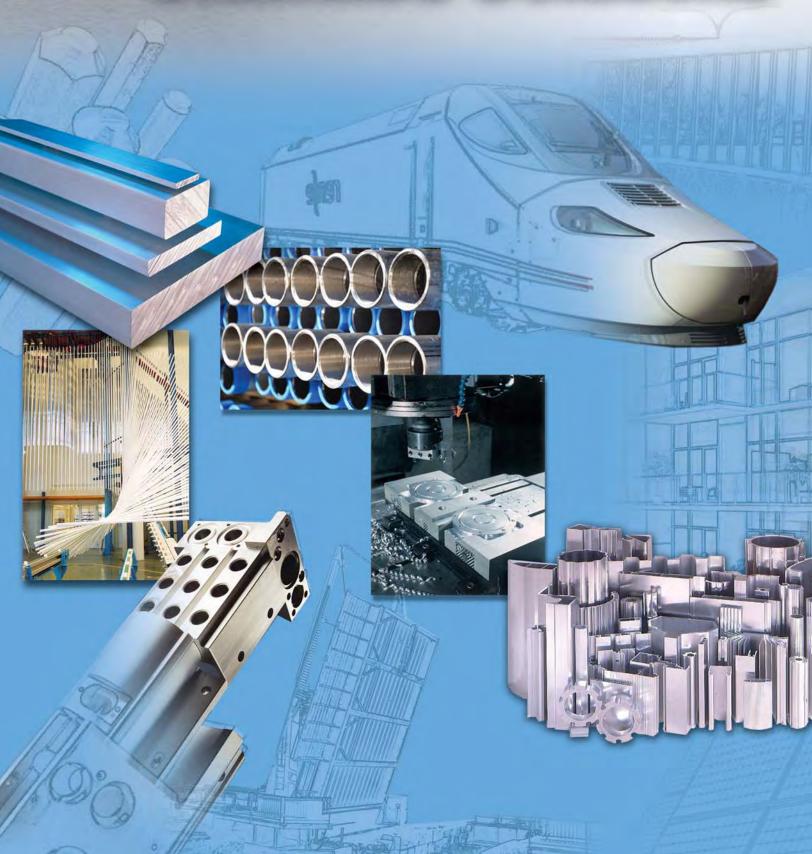
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### The World's Premier Aluminum Extruder



## One Company, Unlimited Solutions





### **Unprecidented Resources, Product Range and Technical Competencies**

Sapa Extrusions, part of the world's largest aluminum profile company, is the **North American leader in common alloy extruded aluminum products.** From raw aluminum to assembled products, we offer:

- The industry's broadest product capabilities in press sizes and tonnages (direct and indirect extrusion), alloy selection, circle sizes, profile types and "green" billet:
  - Standard and custom shapes up to 20" circle size
  - Seamless pipe and tube up to 15.375" O.D.
  - Structural pipe and tube up to 8.625" O.D.
  - Rod and bar, standard and specialty:
    - Rod up to 12.125" diameter
  - Square bar up to 9" thickness
  - Rectangular bar up to 19.6" width
  - Heat sinks with fin ratios up to 16:1
- Everything you need to go from idea to assembled product Complete facilities for:
- Manufacturing Cast billet, die design & manufacture and extrusion
   Fabrication From cutting, forming, machining and joining to assembly and special packaging
- Finishing Painting, anodizing, environmentally friendly special coatings and high speed vertical powder coating line
- Complementary capabilities and logistical advantages of 16 North American plants
- Enormous competencies in design and technical support, mechanical and application engineering, metallurgy and project management, plus the resources of our North American Technical Center
- Financial strength and stability as part of Norwegian Orkla ASA with operations in 30 countries, net sales of over \$5 billion (US) and 13,500 employees
- GENESIS Production System a process of continuous improvement to eliminate
  waste and create value; everyone is involved and contributes to the process of change
- Customer Value Management a documented program that brings unprecedented value to our customers

Continuing growth and capital investment provide us with unique, integrated assets to be the efficient and competitive supplier you demand. We develop a comprehensive understanding of our customer's business in order to establish close and long-term relationships.

### Sapa Extrusions provides complete customer solutions for these markets:

- Distribution
- Industrial & Consumer Durables
- Commercial & Mass Transportation
- Automotive Applications
- Solar & Renewable Energy
- Residential and Commercial Building & Construction
- Fabrication
- Green Technology
- Finishing
- Highway & Bridge Construction

Core values of entrepreneurial spirit, commitment, honesty, responsibility, innovative focus and customer orientation make us a company that is easy to do business with. We look forward to serving you.

### SAPA EXTRUSIONS THROUGHOUT NORTH AMERICA

### Complementary Capabilities and the Industry's Best Logistical Solutions

Sapa Extrusions operates 16 plants with 53 presses strategically located throughout the U.S. and Canada. These are organized into five market segments:

### Northeast Region

Montreal, Quebec, Canada Mountaintop, PA Mississauga, Ontario, Canada

### Industrial Region

Connersville, IN Cressona, PA Elkhart, IN Kokomo, IN Spanish Fork, UT

### Southeast Region

Delhi, LA Gainesville, GA Yankton, SD

### Product Specialty

Burlington, NC Magnolia, AR International Supply Solutions

### West Region

City of Industry, CA Portland, OR Vancouver, British Columbia, Canada













### NORTH AMERICAN TECHNICAL CENTER

**Unequalled Technical Support** in Product Development



Sapa Extrusions' North American Technical Center (NATC) in Portland OR provides unequalled technical support in product design and development for Sapa's North American operations. Our experienced team includes specialists with engineering, marketing, management, machining and product design backgrounds. We provide innovative solutions for new end-use applications that benefit our customers.

### **Dedicated to Customer Value**

Customers want solutions that reduce their costs, decrease lead time and increase the value of their products in the marketplace. The NATC staff optimizes customer value through combined knowledge, experience and technical competence. They are trained to quantify the value of competing approaches to satisfy exact customer requirements, affording our customers a competitive advantage. The Center offers product expertise in:

- Solar Energy
- Thermal Management
- Building & Construction
- Electric Vehicles
- Automotive Applications
- On-Highway Vehicles
- High Speed Rail
- Wide Range of Consumer & Industrial Applications

The NATC can provide **complete project management** to guide you every step of the way from concept though completion. Available services include:

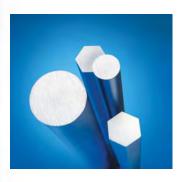
- Technology Transfer Direct access to Sapa's enormous worldwide capabilities can transfer production technology to supply products worldwide for global demand.
- Design expertise to create cost-reducing, corrosion resistant, sustainable, lightweight products in aluminum
- Prototyping A dedicated on-site prototyping cell allows customers to physically examine new concepts.
- Testing and Analysis advanced research and analysis capabilities with computer simulations and several types of modeling

The NATC conducts the Sapa Profile Academy. Presented by Sapa experts and qualified external lecturers, this advanced three day course is designed to demonstrate opportunities with aluminum. An educational experience that raises skill levels and increases the competitiveness of companies and designers, the Profile Academy is certified for 24 professional hours.

# Istribution

### Markets served...

### The Leader in Supporting Our Distribution Partners





Sapa Extrusions offers the industry's largest choice of extruded shapes (standard and custom), seamless and structural pipe & tube, and standard and specialty rod and bar. Our North American network of production and supply facilities can satisfy all of your extrusion requirements. We have exceptional capabilities in extruded sizes, alloys and tempers, including both direct and indirect extrusion methods.

We offer these value-added services:

- For expedited response, we maintain a depot inventory
  of many standard profiles that are marketed by Service Centers.
  At strategic locations nationwide, Sapa offers an unprecedented
  selection of shapes and sizes to meet your needs.
- Market and technical training
- Integrated capabilities for fabrication, assembly, painting, finishing and special packaging

Sapa Extrusions has introduced the new Premier *plus*™ Program with industry leading benefits for member distributors. Baseline benefits include a state-of-the-art e-commerce support system, access to Standards Depot, EDI Order Entry, specialty products supply and product training. For qualifying members, there are attractive add-on benefits that include lead development, expedited order service and fixed lead-time reserve.

Through our GENESIS Production System, we focus on continuous improvement, adding value at every stage to become a better partner for our distributor customers. A comprehensive understanding of your business helps us to develop close and long-lasting relationships.



### The Industry's Broadest Product Line

Sapa Extrusions has long been recognized as a leading supplier of standard and custom extruded profiles for virtually every industrial and consumer market. From cost-effective, precision products for machining... to engineered and fabricated custom shapes for consumer products and appliances... to semi-fabricated and fully fabricated assemblies.. to advanced product for thermal management and the LED industry, no one offers more choices and greater value.

We offer the industry's broadest product line with an unmatched choice of alloys, circle sizes up to 20" and complete fabrication services in standard and specialty products:

- Standard and Custom Extruded Shapes (Solid, Semi-Hollow and Hollows)
- Rod ECON-O-ROD® plus, ACC-U-ROD®, Impact Rod
- Bar ECON-O-PLATE®, ACC-U-PLATE®, ACC-U-BAR®
- Tube, Pipe (Structural & Seamless), Mechanical Seamless Tube, Thin Wall Superior Quality Construction Tube, Square and Rectangular Tube
- Heat Sinks (standard & high fin ratio)
- Electrical Bus Conductor Tube, Bar, Extruded Shapes
- Slip-Resistant DIAMONDBACK<sup>®</sup> Systems

In-house facilities for melting, casting and metal treatment

guarantee billet availability and expedite delivery of specialty products. Our continued investment in advanced equipment includes a metallurgical laboratory and process systems that provide optimum control of alloy chemistry. Sapa products assure standards for repeatable mechanical properties and specialized alloy grades with superior machinability and formability.

Our expertise in application engineering, manufacturing, design and marketing solutions can lower your production costs, improve product design and add aesthetic appeal to products in a wide variety of industries. We provide **everything you need to go from concept to completion.** 









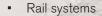


### Full Scope Support for Vehicle Design and Manufacturing

**Aluminum is the preferred material of choice** within the transit industry. The inherent characteristics of aluminum give manufacturers and end-users an advanced alternative to other metals. For manufacturers, opportunities for next generation shapes and aerodynamic designs create more end-user marketing opportunities. For end-users, the benefits of aluminum translate into greater savings in product efficiency, longevity and load capacity.

Sapa brings a history of transit technology and technical achievement to North America. In Europe and Asia, Sapa has been providing transit builders with full scope support for vehicle design and manufacturing to develop the most advanced and efficient global transit systems. Sapa's years of experience in aluminum profiles has proven superiority with a full range of fabrication and assembly services, from Friction Stir Welding to sub-assemblies to complete structures... turnkey solutions that lower manufacturing costs and increase productivity. Sapa's resources ensure success for any transit application. Sapa's North American locations help meet US-based manufacturing content for transit vehicles. As a global leader in transit solutions, Sapa looks forward to developing turnkey solutions for your requirements in:

- Commercial truck/trailers
- Truck bodies and equipment
- Mass transit
- Bus vehicles
- Marine industries











### A Driving Force in the **Automotive Industry**

Sapa's leading edge technology has become the innovative "driving force" in the automotive industry. We serve virtually every brand across North America and around the world with an extensive range of components and systems for cars and trucks:

- Safety parts
   Engine parts
   High finish trim
- Seat components
   Structural parts

### Application engineering, manufacturing and design specialists

offer assistance with custom shapes, unique applications and solutions to your most demanding applications. Our fabrication facilities are fully integrated with the extrusion process to provide semi-finished and fully finished components and assemblies. Sapa Europe's extensive fabricating experience is expanding these capabilities in North America:

- Friction Stir Welding
   CNC Machining Centers
- Energy Absorption Technology
- Precision cutting, punching, forming and bending
- Deburring, beveling/chamfering
- Painting, anodizing, powder coating and labeling
- ISO 9001-2008 Certification

Advanced technical support and product development is provided through our North American Technical Center:

- Individual development areas for customers
- Prototype development capability
   Training center

With Sapa Extrusions as their supplier, manufacturers gain these advantages:

- Global presence
   Innovative design solutions
- Expertise on light weighting
   Just-In-Time delivery
- Unlimited manufacturing possibilities
   Quality assurance
- Turnkey sub-assembly delivery
   Long term partnership



### The Right Development Partner for the Solar Market





Sapa Extrusions is a world leader in aluminum profiles and a key supplier to the solar industry. Sapa's Renewable Energy Organization provides solutions to all solar market segments:

- Photovoltaic mounting systems
- Module frames and components
- Concentrated solar power collectors
- Inverter housings and components
- Thermal management solutions

With the fast-paced growth of the solar industry, choosing the right development partner is critical. As the world's largest aluminum extrusion company, Sapa offers the knowledge, capacity and quality to provide the best solutions for its customers. Plants throughout the United States and Canada enable Sapa to meet local content requirements with efficient logistical solutions in:

- Large circle size and multi-void hollow extrusions, and complex profiles
- A wide range of alloys and surface finishes
- Single-source fabrication
- Component assembly, kitting and logistics
- Product development

Sapa's manufacturing processes take advantage of aluminum's unique properties: recyclability, light weight, high strength, natural corrosion resistance and ease of fabrication... making it the material of choice over galvanized steel and other rolled metals.

Sapa has earned a strong position throughout the renewable energy industries. Our knowledge of aluminum design is based on hundreds of thousands of customer solutions and nearly 50 years of business in Europe, North America, and Asia. Our North American Technical Center shares this expertise with customers to develop complete and cost-effective answers... from simple solutions to the most challenging and unique applications.













### Extruded Aluminum Products for Every Architectural Requirement

Sapa Extrusions continues its tradition of leadership in a full range of extruded aluminum profiles for the residential and commercial building industry. Complementing our advanced production facilities, we provide complete project management and sales support:

- Engineering expertise to assure the right application, best design and correct fit
- Advanced facilities for painting (including high speed vertical powder coating line), anodizing and special coatings
- Complete fabricating services from precision cutting to semi-finished and fully finished parts and assemblies that meet AAMA Specifications and CSI Codes
- Order coordination to assure on-time delivery of the exact quantities required including sequenced deliveries

### Sapa offers the widest choice in standard and custom extruded aluminum products for every architectural requirement:

- Railing systems (including aluminum and glass combinations)
- Panel and Sun Control systems
- Architectural components including column covers, decorative trellis, sun control systems, access gates, privacy panels, divider panels and ornamental fencing
- Storefront systems
- Thermal Barrier manufacturing capabilities in Chemical Fill & Debridge and Iso-Bar
- Alumax shower and bath enclosures
- Access systems including ramps, stair towers, pedestrian bridges, walkways, stairs, landings and gangways
- Window and door framing systems and components
- Walkway covers
- Spectator seating
- Rigid aluminum electrical conduit
- Aluminum bridge decking systems





### No One Offers More Finish Choices

Sapa Extrusions specializes in the application of high-performance coatings on aluminum products for every commercial, consumer and industrial market.

Sapa's high-capacity systems are designed to paint and anodize the newest generation of coatings. Our high-capacity vertical powder coating line can accommodate very large volumes with short lead-times to produce an unbeatable product. Our high-speed conveyor system for electrostatic paint application can complete projects up to 25 feet in length. As a licensed applicator for all major paint manufacturers, we offer the greatest selection of premier coatings and colors.

Being environmentally conscious is important to us at Sapa. Therefore, in order to contribute to the sustainability of our planet, we use a Regenerative

Thermal Oxidizer (RTO). This state-of-the-art emission destruction technology captures and destroys up to 98% of solvent emissions (VOC's) associated with liquid spray coatings. All Sapa products meet or exceed AAMA specifications of AAMA 611.98, 2603.98, 2604.98 and 2605.98. Sapa Extrusions Coatings Division is ISO 9001-2008 certified.



- 11 liquid paint lines and 2 powder coat lines
- Non-chrome and chrome phosphate conversion coating systems
- Large selection of acrylic enamels and polyester paints

 Color matching & blending system utilizing multiple interfaced computer and color spectrometer systems to match & blend acrylic and polyester paint coatings

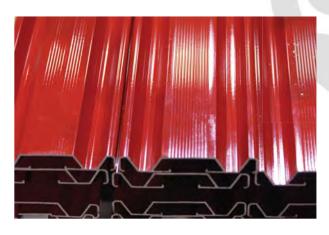
### For the latest in anodized finishes, we offer three facilities for:

- Parts up to 31.5 feet in length:
  - Long length profiles
  - Formed shapes
  - Assembled parts
  - Architectural panels
  - Fabricated parts
  - Uniform coatings for inside diameters
- Sulfuric acid anodizing in clear, organic, inorganic dyed finishes

- Sapa Select "green" anodic coatings
- Caustic and acid etch capabilities
- Architectual bronze finishes with electrolytically deposited color
- Hard-coat anodizing
- Bright Anodizing







### Meeting or Exceeding LEED® and AAMA Standards



Sapa Extrusions is affiliated with the Leadership in Energy and Environmental Design (LEED®) Building Rating System™ to encourage and accelerate global adoption of sustainable green building and development practices.

We offer products that meet or exceed LEED® Standards and AAMA Specifications and are compliant with standards for CSI, RoHS and ELV requirements:

- Sapa Green Billet with up to 95% external/internal recycled content
- Sapa Select Acid Etch Anodic Coatings offer an enhanced surface appearance while reducing landfill waste by up to 90% of traditional anodizing processes.
- Sapa Eco-Powder Coating that meets AAMA 2605 Standards

**Aluminum, the "Green" metal,** is lightweight, flexible, formable and has high strength. Of all the aluminum produced since 1888, 75 percent is still in use today, making it an important part of a sustainable society.

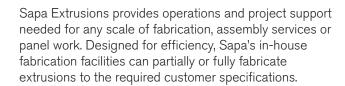
# Fabrication Services

### Nationwide Network of Full-Service Capabilities









We can provide complete fabrication services through our North American network of facilities. That includes full-service capabilities, technical services and close coordination to assure that each project is completed economically and with the utmost quality. **Customers enhance their value stream** with our fully integrated operations in extrusion, painting, anodizing, fabrication, welding, assembly and technical services. Our project managers carefully coordinate the extrusion and coating operations to streamline each project. Sapa's single-source capabilities also mean **a shorter lead-time for our customers** with on-time delivery that corresponds to their schedule.

Sapa's value-added fabrication services include:

- Precision cutting
- Drilling, tapping, punching
- Forming
- Beveling / chamfering / knurling
- CNC Bending and Machining
- Stretch and roll forming
- Assembly and packaging

We have extensive experience with many diverse product applications in transportation, building and construction, customer durables, medical and renewable energy markets. Joining capabilities include:

- Riveting
- Joint screws
- Bolting
- Snap fitting
- Welding, including Friction Stir Welding
- Adhesive bonding

Plus we offer these new product development services:

- Structure and application analysis
- Concept development
- Expert design assistance

**Sapa Extrusions TDA** provides engineers and fabricators with consistent and exacting standards in the manufacture, machining and fabrication of the most difficult and miniature aluminum extrusions in both soft and hard alloys.



### Helping You Win in Today's Marketplace

Sapa Extrusions is committed to product development based on a comprehensive understanding of our customer's needs. By building long term relationships, we share our insight, capabilities and technology to improve your products and enhance your success in the market.

Contact us at the inception of your idea or project. We offer vast competencies... from window framing in the new Cowboys Stadium to innovative consumer products. We assist with application challenges, improve product performance and expand your opportunities. For designers and dreamers, we are dedicated to **shaping the future**, your future.



### Sapa Solutions in Action

### **Advancing Renewable Energy**

As a major supplier to the solar industry, we work closely with customers to capture their design intent, reduce cost and help optimize the value of their products. In partnership with engineers and developers, we completed Michigan's largest solar PV rooftop installation.

### **Protection with Rigid Aluminum Conduit**

As the leading producer of rigid aluminum conduit, Sapa Extrusions customizes installations for electric power plants, chemical processing and transportation industries. At a five mile long telecom project in Kansas, use of Sapa products saved over 7,000 installation hours and improved corrosion resistance, while weighing only 1/3 as much as steel.

### **Custom Bath and Shower Enclosures**

Alumax Bath Enclosures by Sapa are custom designed and fabricated to meet the needs of professional installers. Our innovative configurations meet CSI Codes, ADA and BEMA standards. Product support is provided by a nationwide network of factory owned service centers.

### **Decking for Accelerated Bridge Construction**

Sapa Extrusions has been installing time-proven aluminum bridge decking since 1987. At an installation on US Route 58 in Virginia, Sapa isotropic decking lowered lifecycle costs – its reduced weight permitted widening using the existing substructure.





### Sapa Extrusions

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